

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A gene recombination vector containing an expression cassette for enhancing photosynthesis activity, comprising

(1) a DNA fragment comprising a gene encoding a protein having FBPase and/or SBPase activities which comprises

(a) DNA having the nucleotide sequence of SEQ ID NO: 6;

(b) DNA having a nucleotide sequence in which one nucleotide is deleted, substituted, added or inserted in SEQ ID NO: 6 and encoding a protein having FBPase and SBPase activities; or

(c) DNA hybridizing under stringent conditions with DNA having a nucleotide sequence complementary to the nucleotide sequence of SEQ ID NO: 6 and encoding a protein having FBPase and SBPase activities~~between,~~

(2) a Rubisco large subunit gene~~and,~~

(3) an acetyl CoA carboxylase subunit gene,

(4) psbA promoter having the nucleotide sequence of SEQ ID NO:7 upstream of the DNA fragment comprising the gene encoding a protein having FBPase and SBPase activities and between the Rubisco large subunit gene and the DNA fragment, and

(5) rps16 terminator having the nucleotide sequence of SEQ ID NO:8 downstream of the DNA fragment comprising the gene encoding a protein having FBPase and SBPase activities and between the DNA fragment and the acetyl CoA carboxylase subunit gene,

wherein the DNA fragment of (1) is located between the Rubisco large subunit gene and the acetyl CoA carboxylase subunit gene.

2-7. (Cancelled)

8. (Currently Amended) The vector as claimed in claim 1, wherein the expression cassette has a ribosome-binding site upstream of a translation initiation point of ~~at~~the DNA fragment comprising ~~at~~the gene encoding a protein having FBPase and/or SBPase activities.

9-10. (Cancelled)

11. (Previously Presented) The vector as claimed in claim 1, wherein the Rubisco large subunit gene and the acetyl CoA carboxylase subunit gene are genes derived from tobacco, respectively.

12. (Cancelled)

13. (Currently Amended) A transformed chloroplast characterized in that the vector according to ~~claim 1~~ any one of claims 8, 11 or 20 is introduced into chloroplasts.

14. (Original) A plant containing transformed chloroplasts according to claim 13.

15. (Original) The plant as claimed in claim 14, wherein the plant is tobacco.

16-19. (Cancelled)

20. (New) The vector as claimed in claim 11, wherein the Rubisco large subunit gene has the nucleotide sequence of SEQ ID NO:15 and the acetyl CoA carboxylase subunit gene has the nucleotide sequence of SEQ ID NO:16.